

State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-3406 FAX (603) 271-7894



December 3, 2002

Mr. John Colony III Harrisville, NH 03450

RE Nubanusit Lake Dam, #166.04 in Nelson (Ref. LOD June 18, 2002)

Dear Mr. Colony III:

This letter is in follow-up to our phone conversation on November 27, 2002. During that conversation you indicated that the Town installed a guardrail along the road and boulders on the right side of the discharge culvert to prevent vehicles from parking above the culvert (i.e. above the deteriorated steel beams). The Town of Nelson also informed DES of the guardrail installation in a letter dated November 25, 2002.

During our conversation you inquired whether or not it was still necessary to hire a structural engineer to investigate the integrity of the steel beams because the immediate threat of a collapse from vehicle traffic has been addressed. It is DES's opinion, that although vehicles can no longer park above the area in question, the integrity of the steel beams must be analyzed by a Professional Engineer licensed in the State of New Hampshire or removed. DES is concerned of the possibility of collapse (even a limited collapse) because the discharge capacity of the gates will be reduced. In our November 18, 2002 letter, DES requested that you identify an engineer within 15 days from the receipt of that letter. As you verbally requested, DES will allow you an extension until May 1, 2003 at which time your engineer should have submitted a schedule to DES to investigate and report on the condition of the steel beams.

In addition to our conversation regarding the integrity of the steel beams during our November 15, 2002 site meeting, we discussed the issue of a scour hole located immediately downstream of the gates. During my culvert inspection on November 17, 2002, I observed a scour hole that was at least 3 feet deep, but could not be inspected properly as the gates were open to accommodate the annual draw down. DES strongly suggests hiring a Professional Engineer, perhaps the same one you engage to evaluate the steel beams, to investigate and report on the scour hole. Although it was verbally indicated that the scour hole has been there for years and its condition has not worsened, there is no monitoring data to corroborate those statements. The scour hole is a safety concern because if the depth of the hole increases, the pore pressures within the soil will exceed the weight of the remaining soil which could lead to a piping failure under the gate structure.

Lastly, during our phone conversation on November 27, 2002, you indicated that John Colony Jr. is planning on paying the outstanding Annual Dam Registration Fee. DES is anticipating that payment in the near future. Please be advised that DES is willing to work with you to address the outstanding issues above as well as those listed in the June 18, 2002 Letter of Deficiency.

http://www.state.nh.us TDD Access: Relay NH 800-735-2964

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If you have any questions please, do not hesitate to call me at 271-3406. Our normal business hours are from 8:00 a.m. through 4:00 p.m., Monday through Friday. Please forward all correspondence to me at the Water Division, Dam Safety.

Sincerely,

Jeffrey Blaney

Dam Safety Engineer

Water Division

cc:

DES Legal Unit, Gretchen Rule

John Colony Jr.

Town of Nelson

JMB/h:/safety/dam/letter/16604b.ltr